

ABSTRACT

An exemplary embodiment of the invention is a network element in an optical communications network. The network element includes a data collection application program interface (API) for receiving a request from a client for network topology information along with a topology gatherer module, a topology change module and a gateway node module, each in communication with the data collection API. One of the topology gatherer module, topology change module and gateway node module provides the network topology information requested by the client to the data collection API. The data collection API then provides the network topology information to the client. Alternate embodiments include a method of collecting optical communications network.